

REMARKS

The Office action of February 13, 2009, has been carefully considered.

Claims 1-9 have been rejected under 35 USC 112, 2nd paragraph, as being indefinite, based on cited language in claim 1. Claim 1 has been amended to utilize language corresponding to the understanding of the Examiner set forth in the Office Action, "capable of rotationally locking the bone anchoring element and the threaded shaft."

Withdrawal of this rejection is requested.

Claims 1, 2, 4 and 9 have been rejected under 35 USC 102(b) over Mullane.

Mullane, which is discussed in paragraph [0007] of the present application as published, discloses a bone anchoring device provided with spherical articulation between a bone anchoring element and a threaded shaft. However, the threaded shaft includes two opposed studs or tabs 34 which are engaged in opposed vertical slots in an attachment cup forming a part of the anchoring element, which provide a slidable point of rotation; see col. 4, lines 34-38.

While the anchoring element and the threaded shaft are locked in rotation, the tabs and the slots effectively negate the spherical articulation; the threaded shaft can only toggle in a single plane with respect to the anchoring element because the tabs in the slots prevent movement outside of that plane. Multiple orientation is impossible.

The tabs, moreover, have a circular transverse cross section, to slide within the slots, contrary to the invention.

Claim 1 has been amended to recite that the rotational linkage means between the bone anchoring element and the threaded shaft permit spherical articulation between the bone anchoring element and the threaded shaft.

It is further noted that according to claim 2, the

rotational linkage means is located outside of the spherical articulation. This is different from the arrangement of Mullane, in which the tabs and slots are part of the ball and socket, respectively, and are therefore within the spherical articulation means.

Accordingly, the invention as claimed is clearly patentable over the cited references, and withdrawal of these rejections is requested.

Claims 1, 2 and 4-8 have been rejected under 35 USC 103(a) over Bernhardt et al in view of Altarac et al.

Bernhardt et al discloses a multi angle bone bolt, with spherical articulation provided by a ball and socket joint. No rotational linkage device is disclosed.

The Office Action alleges that Altarac et al teaches a bone anchoring device having a rotational linkage means 70, 72 and 74 between the bone anchoring element and the threaded shaft. It is alleged that the elements are arranged "in order to rotationally lock the elements relative to each other during installation of the device (column 2 paragraph 21)."

In fact, paragraph [0021] of Altarac et al states:

The embodiment shown in FIG. 5 is a preferred modification wherein the bottom portion of the engagement head 23 is contoured, to form a hollow recess 70 that is pressed upward by a resilient spindle member 72 which is captured in a cavity 74 in the cage. In this embodiment, the post member retains its ability to be variably angled in the cage, but it is biased outward against the cavity of the cage so that it is more apt to stay in a position in the cage before it is tightened (i.e. it is less apt to flop.)

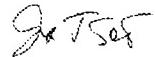
No rotational linkage is disclosed or suggested by this arrangement. In the disclosed embodiment, the engagement head is pressed upward by a resilient spindle 72, which is not

associated with any rotational linkage. If a rotational force is applied to post member 20, the post member will rotate with respect to the cage 18. The arrangement is disclosed only for the purpose of preventing the post member from flopping, and there is not the slightest suggestion that the arrangement can or should prevent rotation of the post member with respect to the cage.

Withdrawal of this rejection is requested.

In view of the foregoing remarks, Applicant submits that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,



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